

Figure 1

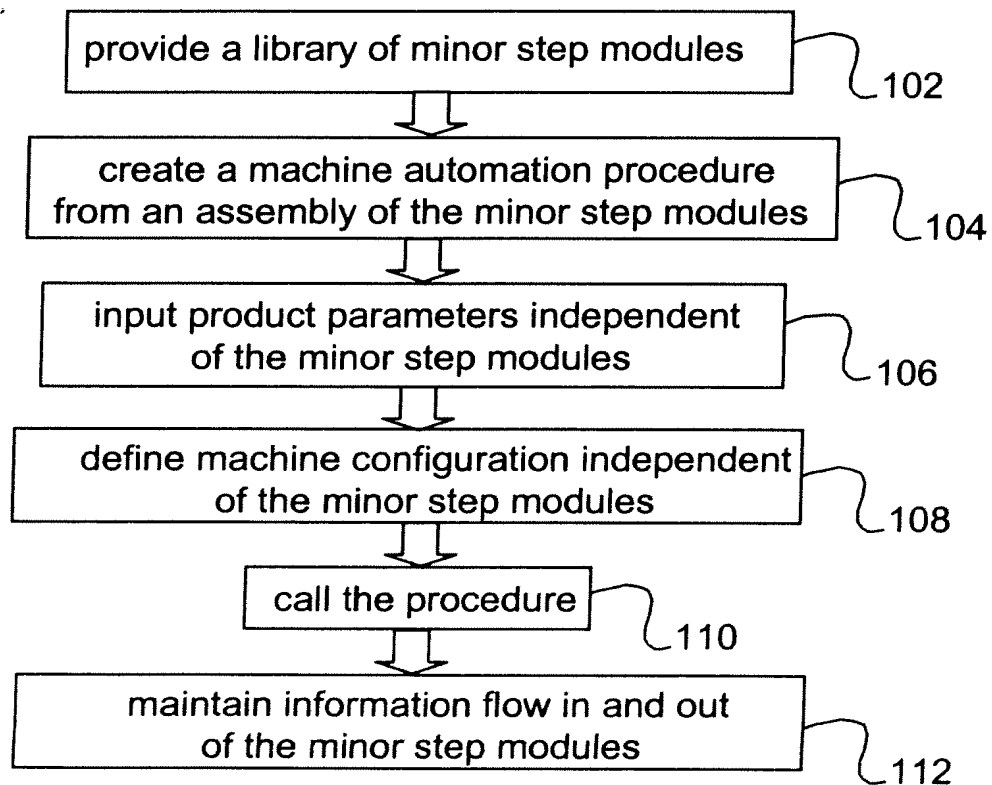


Figure 2

12a

Figure 3a

Procedure Creator - Editing Procedure *

File Edit Utility Help

1363-Check Status Procedure Save Properties

Add Add Clone Add Tools

1363 Linamar AVNT Run Proc. Run Current Step Edit Mode

Single Step Acknowledge

Label Measure Part Update

Step Message

Major Step Type 1363 Measure Part Browse

Minor Step Type Please Select...

Wait for Part

Set 'Running' Data Channel to Low

Output Ready to Access HIGH

Wait for Start Test

Wait for Part Present

Set 'Running' Data Channel to High

Read Part type

Read Lathe #

END Wait for Part

Measure Part

Turn On Light #1

Turn On Light #2

Raise Gauge-Position #1

Wait for Cylinder Switch

Read LVDI-Position #1

Lower Gauge-Position #1

Wait for Cylinder Switch

Advance Part Shuttle

Wait for Cylinder Switch

Raise Gauge -Position #2

Wait for Cylinder Switch

Read LVDI-Position #2

Acquire Image from Camera 1

Flip Image

Acquire Image from Camera 2

Process Image

Turn Off Light #1

Turn Off Light #2

Lower Gauge-Position #2

Wait for Cylinder Switch

Set 'Running' Data Channel Low

END Measure Part

Normal

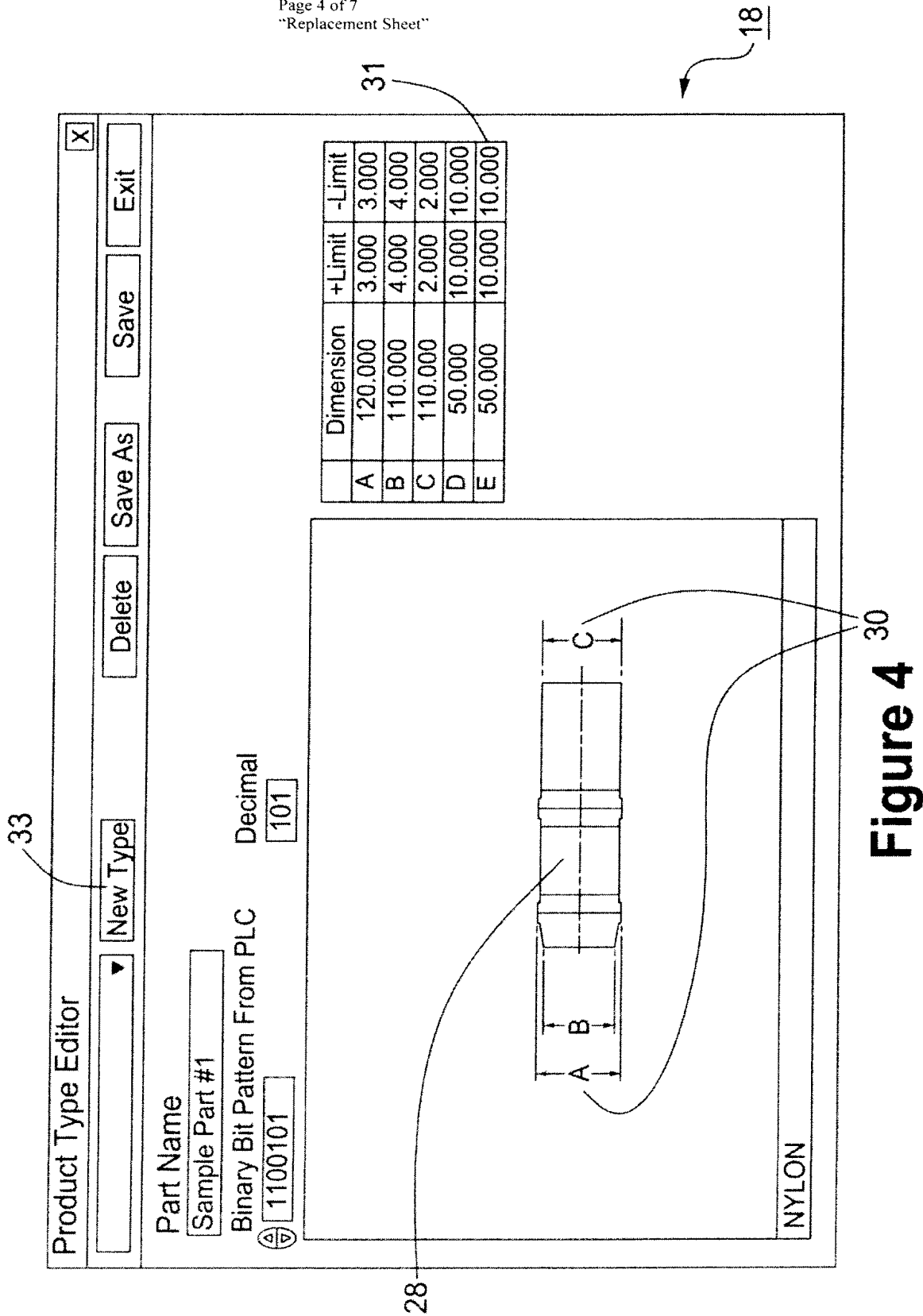
16b

24

12

14b

Figure 3b



System Configuration

About

OK

Apply

Cancel

DIGITAL OUT

DIGITAL IN

ANALOG OUT

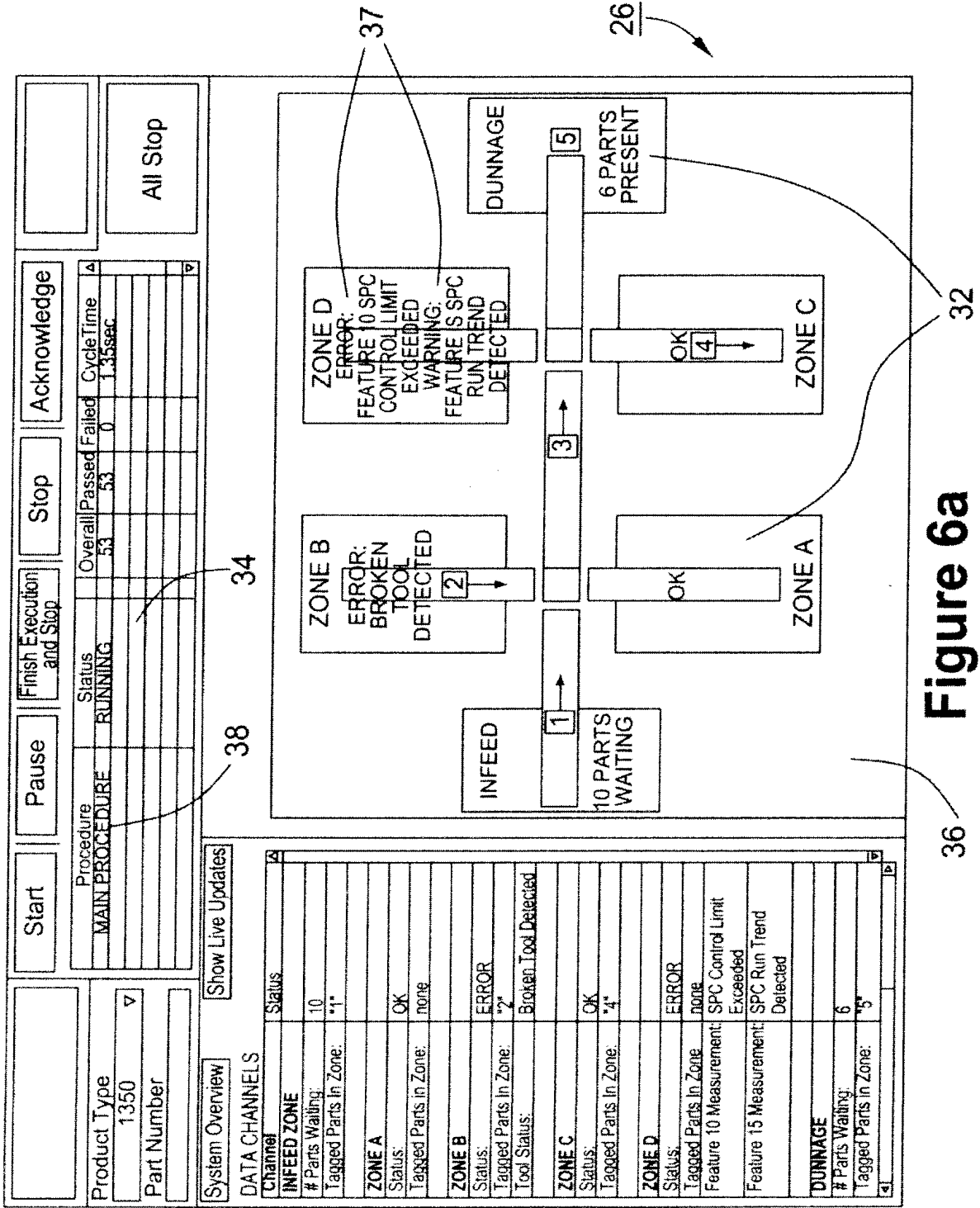
ANALOG IN

DIGITAL MULTIMETER

Hardware Not Installed

Channel Number	Channel Name
0	Fault Beacon
1	Access Door
2	Operator Alarm Buzzer
3	Fiber Load Chuck
4	Bypass Relay 1
5	Glue Dispense A
6	Glue Dispense B
7	Glue Dispense A Raise Lower
8	Glue Dispense B Raise Lower
9	Watchdog Timer
10	Submount Probe Block
11	Cover Gas Valve A
12	Cover Gas Valve B
13	Spare 1
14	Spare 2
15	Reflow Laser Raise/Lower
16	Fiber Alignment Chuck Extend

Figure 5



26

Product Type
1350

Part Number

Start **Pause** **Finish Execution and Stop** **Stop** **Acknowledge**

All Stop

System Overview

ZONE IMAGE

ZONE D

ERROR:
FEATURE 10 SPC
CONTROL LIMIT
EXCEEDED
WARNING:
FEATURE IS
SPC RUN TREND
DETECTED

Channel Name: FEATURE 10 SPC **Parent Zone:** Zone 10

Notes: Feature 10 LVDT Measurement **Unit:** Inches

Procedure
MAIN PROCEDURE

Status
RUNNING

Overall
53

Passed
53

Failed
0

Cycle Time
1.35sec

Xbar Chart **Range Chart** **Pareto Chart** **Histogram Chart** **SPC Statistics**

XBar Chart

Event Summary

Date & Time	Event	Fault Description	Action
10/04/02 12:40:05PM	UCL EXCEEDED	Not Yet Assigned	Not Yet Assigned

Data Channels

Channel	Status
ZONE D	ERROR
Tagged Parts in Zone	None
Feature 10 Measurement	SPC CONTROL LIMIT EXCEEDED
Feature 15 Measurement	SPC RUN TREND DETECTED

Event Summary

Date & Time	Event	Fault Description	Action
10/04/02 12:40:05PM	UCL EXCEEDED	Not Yet Assigned	Not Yet Assigned

Edit Event

Show Events

Show Graph

Figure 6b